1627

RAW SEQUENCE LISTING

Input Set : A:\271592.app

PATENT APPLICATION: US/09/626,242

DATE: 11/16/2001

TIME: 08:59:56

22

3 <110> APPLICANT: FRENKEN, LEO G.

VAN DER LOGT, CORNELIS P.

6 <120> TITLE OF INVENTION: METHOD FOR PRODUCING ANTIBODY FRAGMENTS

- 8 <130> FILE REFERENCE: 060113-0271592
- 10 <140> CURRENT APPLICATION NUMBER: 09/626,242
- 11 <141> CURRENT FILING DATE: 2000-09-27
- 13 <150> PRIOR APPLICATION NUMBER: PCT/EP99/00481
- 14 <151> PRIOR FILING DATE: 1999-01-25
- 16 <150> PRIOR APPLICATION NUMBER: EP 98300525.7
- 17 <151> PRIOR FILING DATE: 1998-01-26
- 19 <160> NUMBER OF SEQ ID NOS: 18
- 21 <170> SOFTWARE: PatentIn Ver. 2.1
- 23 <210> SEQ ID NO: 1
- 24 <211> LENGTH: 22
- 25 <212> TYPE: DNA
- 26 <213> ORGANISM: Artificial Sequence
- 28 <220> FEATURE:
- 29 <223> OTHER INFORMATION: Description of Artificial Sequence: Primer
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- 38 <213> ORGANISM: Artificial Sequence
- 40 <220> FEATURE:
- 41 <223> OTHER INFORMATION: Description of Artificial Sequence: Primer
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- 47 <210> SEQ ID NO: 3
- 48 <211> LENGTH: 53
- 49 <212> TYPE: DNA
- 50 <213> ORGANISM: Artificial Sequence
- 52 <220> FEATURE:
- 53 <223> OTHER INFORMATION: Description of Artificial Sequence: Primer
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- 59 <210> SEO ID NO: 4
- 60 <211> LENGTH: 53
- 61 <212> TYPE: DNA
- 62 <213> ORGANISM: Artificial Sequence
- 64 <220> FEATURE:
- 65 <223> OTHER INFORMATION: Description of Artificial Sequence: Primer
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- 68 aacagttaag cttccgcttg cggccgctgg ttgtggtttt ggtgtcttgg gtt 53
- 71 <210> SEQ ID NO: 5
- 72 <211> LENGTH: 117
- 73 <212> TYPE: PRT

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                                    25
83 Val Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
           35
86 Ala Ala Ser Ser Trp Asn Gly Asp Thr Thr His Tyr Ser Asp Ser Val
89 Glu Gly Gln Phe Thr Ile Ser Arg Asp Ile Ala Lys Asn Thr Ser Tyr
                        70
92 Leu Gln Met Asn Arg Leu Gln Pro Glu Asp Thr Ala Val Tyr Tyr Cys
95 Arg Trp Cys Arg Pro Pro Arg Pro Lys Tyr Trp Gly Gln Gly Thr Gln
              100
                                   105
98 Val Thr Val Ser Ser
99
          115
102 <210> SEQ ID NO: 6
103 <211> LENGTH: 115
104 <212> TYPE: PRT
105 <213> ORGANISM: Lama glama
107 <400> SEQUENCE: 6
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109
    1
                                         1.0
111 Phe Leu Ser Phe Ser Cys Thr Ala Ser Gly Arg Thr Phe Ser Asn Tyr
114 Ala Met Gly Trp Phe Arg Gln Ala Ser Gly Asn Gln Arg Ala Phe Val
115
                                 40
            35
117 Ala Ala Ile Gly Arg Asn Gly Asp Thr His Tyr Ile Asp Ser Val Lys
120 Gly Arg Phe Thr Ile Ser Arg Asp Asn Gly Lys Asp Thr Val Tyr Leu
                        70
123 Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Arg
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126 Ile Trp Val Gly Ala Arg Asp Tyr Trp Gly Gln Gly Thr Gln Val Thr
127
                100
                                    105
129 Val Ser Ser
130
            115
133 <210> SEQ ID NO: 7
134 <211> LENGTH: 116
135 <212> TYPE: PRT
136 <213> ORGANISM: Lama glama
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                                        10
142 Phe Leu Arg Phe Ser Cys Ala Ala Ser Gly Arg Thr Phe Ser Arg Tyr
                                     25
145 Thr Met Gly Trp Phe Arg Gln Ala Pro Gly Asn Glu Arg Lys Phe Val
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148 Ala Ala Val Ser Thr Ser Gly Asn Thr His Tyr Thr Gly Ser Val Lys
                            55
151 Gly Arg Phe Thr Ile Phe Arg Gln Asn Ala Lys Asn Thr Val Tyr Leu
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154 Gln Met Ser Asn Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala
157 Ala Arg Phe Gly Gly Met Asn Trp Lys Tyr Trp Gly Gln Gly Ile Gln
                                    105
                100
160 Val Thr Val Ser
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            115
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165 <211> LENGTH: 121
166 <212> TYPE: PRT
167 <213> ORGANISM: Lama glama
169 <400> SEQUENCE: 8
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173 Phe Leu Asn Val Ser Cys Val Val Ser Gly Gly Ile Phe Ser Asp Tyr
                                     25
176 Thr Leu Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Lys Phe Val
            35
179 Ala Ala Val Ser Ser Gly Gly Ser Thr His Tyr Thr Gly Ser Val Lys
182 Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Ala Asn Thr Met Tyr Leu
                        70
185 Gln Met Ser Ser Leu Lys Pro Asp Asp Thr Ala Val Tyr Tyr Cys Asn
188 Ala Ile Val Pro Pro Thr Arg Thr Phe Cys Gly Arg Thr Tyr Trp Gly
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                                    105
191 Gln Gly Thr Gln Val Thr Val Ser Ser
192
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195 <210> SEQ ID NO: 9
196 <211> LENGTH: 112
197 <212> TYPE: PRT
198 <213> ORGANISM: Lama glama
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204 Phe Val Arg Leu Ser Cys Ala Ala Ser Arg Arg Ala Ser Ser Thr Tyr
                                     25
207 Ala Val Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
            35
210 Gly Arg Ile His Arg Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val
                            55
213 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Thr Gln Asn Thr Val Tyr
                         70
                                             75
216 Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
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225 <212> TYPE: PRT
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232 Phe Leu Arg Phe Ser Cys Ala Ala Ser Asn Ala Leu Phe Ser Gly Tyr
235 Ala Met Gly Cys Phe Arg Gln Ala Val Gly Lys Glu Arg Glu Phe Val
                                 40
238 Ala Ala Ile Thr Trp Asn Asn Arg Asn Thr His Tyr Ala Asp Ser Val
                             55
241 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Val Tyr
242 65
                         70
244 Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
                     85
                                          90
247 Thr Ser Gly Met Arg Arg Leu Gly Asp Tyr Trp Gly Gln Gly Thr Gln
                                    105
250 Val Thr Val Ser Ser
251
            115
254 <210> SEQ ID NO: 11
255 <211> LENGTH: 124
256 <212> TYPE: PRT -
257 <213> ORGANISM: Lama glama
259 <400> SEQUENCE: 11
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263 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Asp Lys Tyr
266 Ala Ile Gly Trp Phe Arg Gln Ala Pro Gly Lys Gln Arg Glu Leu Val
             35
                                 40
269 Ala Gly Ile Ser Thr Gly Gly Ser Thr Asn Tyr Ala Asp Ser Val Lys
272 Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asp Thr Val Tyr Leu
275 Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala
                     85
278 Ala Gly Arg Arg Ile Ser Ser Tyr Tyr Ser Arg Gly Leu Tyr Ala
                                    105
281 Tyr Trp Gly Gln Gly Thr Gln Val Thr Val Ser Ser
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286 <211> LENGTH: 124
287 <212> TYPE: PRT
288 <213> ORGANISM: Lama glama
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294 Ser Leu Arg Leu Ser Cys Glu Ala Ser Gly Arg Ser Phe Ser Asn Phe
                                     25
297 Ala Met Ala Trp Phe Arg Gln Thr Pro Gly Lys Glu Arg Glu Phe Val
                                 40
300 Ala Gly Ile Ser Trp Arg Gly Gly Arg Thr Tyr Tyr Ala Ala Ser Val
                             55
303 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Gly Lys Asn Thr Val Tyr
                         70
306 Leu Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr Cys
307
                     85
309 Ala Thr Ala Tyr Gly Gln Gly Pro Ile Thr Val Pro Lys Phe Tyr Thr
               100
                                    105
312 Tyr Arg Gly Gln Gly Thr Gln Val Thr Val Ser Ser
313
      115
                                120
316 <210> SEQ ID NO: 13
317 <211> LENGTH: 121
318 <212> TYPE: PRT
319 <213> ORGANISM: Lama glama
321 <400> SEQUENCE: 13
322 Gln Val Gln Leu Gln Glu Ser Gly Gly Leu Val Gln Ala Gly Gly
323 1
                      5
                                         10
325 Cys Val Arg Leu Ser Cys Ala Ala Ser Gly Arg Thr Phe Ser Arg Tyr
                 20
328 Thr Met Gly Trp Phe Arg Gln Ala Pro Gly Lys Glu Arg Glu Phe Val
331 Ala Ala Ile Ser Trp Arg Ser Gly Gly Ile Lys Ile Tyr Gly Asp Ser
                             55
334 Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asp Thr Val
                         70
337 Tyr Val Gln Met Asn Ser Leu Lys Pro Glu Asp Thr Ala Val Tyr Tyr
                    85
                                         90
340 Cys Asn Ser Arg Pro Arg Ile Tyr Arg Gly Asn Val Val Tyr Trp Gly
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                                    105
343 Gln Gly Thr Gln Val Thr Val Ser Ser
            115
                                120
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348 <211> LENGTH: 34
349 <212> TYPE: DNA
350 <213> ORGANISM: Artificial Sequence
352 <220> FEATURE:
353 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
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356 <400> SEQUENCE: 14
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360 <210> SEQ ID NO: 15
361 <211> LENGTH: 11
362 <212> TYPE: PRT
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VERIFICATION SUMMARY

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